DRAFT FINAL REPORT

Developing Parking Policies to Support Smart Growth in Local Jurisdictions: Best Practices

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The statements and conclusions in this report are those of the consulting team with contributions from MTC and the Technical Advisory Committee. This report was developed to give examples of potential strategies, programs and tools that may be used in your community. However, your community is unique and therefore it is important to tailor the proposed approach and selection of strategies to meet the specific needs of your own community.

I. Introduction

Communities throughout the San Francisco Bay Area are working to create walkable, transit-oriented districts, designed as lively and attractive places that give people a choice in lifestyle and travel mode. One obstacle is changing conventional parking policies that encourage ample free parking, auto use and discourages walkable transit supportive communities. The challenge is to redefine and modernize parking policies, linking them to economic vitality, quality of life, and livable community principles that support walkability and transit use as key elements of a sustainable community.

A number of communities have developed and implemented approaches to parking policies that support infill, transit-oriented development, and downtown development. This report explores some of these approaches and provides examples of "Best Practices" and innovations from the Bay Area and beyond. Local jurisdictions can use them to define and implement parking policies and practices that support smart growth/Transit Oriented Development (TOD) and best fit their local circumstances. Many communities have found that parking management strategies can improve the quality of life for residents and enhance economic opportunities for businesses, mitigate project impacts, and improve traffic circulation. Parking management strategies work best when they are combined with pedestrian- and transit-supportive policies as a component of downtown/station area/town center plans.

The following sections give examples and best practices in parking management that can be used by local jurisdictions to develop parking policies to support smart growth and transit/TOD policies. The purpose of this report is to identify techniques, strategies programs and tools that can help local jurisdictions to better manage parking resources and to facilitate transit oriented development. These policies and approaches must be tailored to each specific location and reflect the mix of uses, the market for various types of development, the type and level of transit service available, and the access that service provides to jobs and commercial uses. And they must reflect the local community's goals and vision for the future.

The Best Practices examples come from communities that use a combination of innovative parking management strategies, walkability tools and transit oriented development principles to reduce parking demand and make it easier to reach destinations by public transportation. The key is to combine TOD with parking policies and develop the right mix of strategies, recognizing that each community must go

through its own process and define its own approach that fits its circumstances and goals. The Best Practices report is a first step towards helping communities develop the right mix of strategies to meet their own specific situations.

NEW PARKING POLICIES

In response to the increased demand from the increased ownership of automobiles in the early parts of the 20th Century, jurisdictions began to require new uses to provide off-street parking. This practice of requiring enough free parking to meet peak demands became the standard approach to addressing parking in most zoning ordinances. Over the last decade, however, communities have begun to shift away from these existing requirements for free parking. This new approach, which builds on recent research on the costs of free parking and the impacts of parking on urban form, tries to bring the parking policies into a better balance with other local goals. Communities have especially (but not exclusively) focused on areas where these new parking policies can encourage infill and redevelopment, support transit use and walkability, and help preserve existing higher density and mixed-use downtowns and shopping areas.

Recent research has found that households in transit-oriented developments tend to generate fewer vehicle trips, reducing the demand for parking. MTC's Bay Area Travel Survey (2006) found that people living close to transit have a much higher tendency to use transit, walk and bike. Individuals living within ½ mile of a rail/ferry stop use transit for 42 percent of their work commute trip. In comparison, individuals who neither live nor work within ½ mile of a station use transit for only 4 percent of their work commute trips.

Home-based work trips

Travel Characteristic	*Within ½ mile of a rail station or ferry terminal*	*More than ½ mile from a rail station or ferry terminal*	*Total*
In-vehicle driver/passenger	52.6%	85.5%	83.5%
Transit	29.4%	9.9%	11.1%
Bicycle	4.1%	1.5%	1.6%
Walk	12.0%	2.3%	2.9%
Other	1.8%	0.8%	0.9%

Source: MTC 2006

Non-work trips

Travel Characteristic	*Within ½ mile of a rail station or ferry terminal*	*Greater than ½ mile from a rail station or ferry terminal*	*Total*
In-vehicle driver/passenger	56.1%	82.3%	80.8%
Transit	16.0%	3.1%	3.8%
Bicycle	2.1%	1.3%	1.3%
Walk	22.7%	11.0%	11.7%
Other	3.1%	2.3%	2.3%

Source: MTC 2006

Total trips

Travel Characteristic	*Within ½ mile of a rail station or ferry terminal*	*Greater than ½ mile from a rail station or ferry terminal*	*Total*
In-vehicle driver/passenger	55.3%	83.0%	81.4%
Transit	19.2%	4.6%	5.4%
Bicycle	2.6%	1.3%	1.4%
Walk	20.1%	9.1%	9.8%
Other	2.8%	2.0%	2.0%

Source: MTC 2006

Nearly one-third of households living within a ½ mile of rail/ferry transit are zero-vehicle households, three times the regional average (MTC, 2006). A 2002 working paper (Cervero and Duncan) estimates that households within a ½ mile of transit stations are significantly less likely to own a car and even more likely to own only one.

Vehicle Availability by Proximity to Rail Stations and Ferry Terminals

			More than 1 mile				
Vehicles	Within ½ mile	½ mile to 1 mile	Urban	High suburban	Low suburban	Rural	Total
Zero	29%	14%	11%	6%	2%	2%	10%
One	39%	38%	39%	29%	27%	21%	32%
Two or more	32%	48%	50%	65%	71%	77%	58%
Vehicles per household	1.1	1.6	1.6	1.9	2.1	2.3	1.8

Source: MTC 2006

This reduces demand for parking spaces near rail and ferry transit stations. In an analysis of 12 housing projects near BART stations, Dr. Robert Cervero (1996) found that TODs reduce parking demand per household by 23 percent and concluded that residents actively choose to live in TOD locations that offer transit accessibility to job sites. Another study (Cervero and Duncan, 2002) found that among BART station area residents, 40 percent choose to live near BART stations due to location and commute choices.

Reducing parking, as part of TODs, can also result in a significant cost savings. In a Caltrans study on Parking and TOD (Boroski et al 2002), which analyzed eleven TOD sites, suggests that it is possible to reduce parking anywhere from 12 percent in San Diego (Uptown District), to 20 to 34 percent in Pleasant Hill and up to 60 percent in Long Beach (Pacific Court). If a project can save 500 spaces at $25,000 per space, the developer will benefit from a $12.5 million reduction in parking construction cost. Typically, the last 15 percent of parking spaces constructed produce less income per space and cost more than average to build (Kodama, Willson, & Francis, 1996).

Section I: Supporting Alternatives to Driving Alone

DEFINITION

A key component of a parking management program is to combine parking strategies with an increase in transit service options or in an area with lots of transit options. Transit improvements and incentives help reduce parking demand and create viable alternative modes in areas trying to implement parking management and pricing programs. Downtowns and town centers with high quality transit benefit greatly by using transit as a resource in-lieu of parking spaces. This can result in a reduction in parking demand that combined with transit use and pedestrian improvements, creates a more vibrant, walkable area.

During the last decade local communities, cities and region-wide areas have improved existing and developed new public transportation service options to become an attractive and viable alternative to driving alone. To achieve these goals, public transportation providers have designed and developed services that are accessible (easy to use), available for use (responsive to demand) and designed from the user's point of view (targeted user groups). Key strategies include:

- Increase use of transit service
- Carsharing
- Transit friendly parking design
- Transit Overlay Zones
- Transit incentive programs
- Walkability and wayfinding
- Other transportation demand management programs

ISSUES

Integrating parking policies and strategies with transit service, incentive programs; pedestrian-friendly design that promotes use of alternative modes of transportation offers opportunities and challenges. Transit and parking policies are both critical to the success of creating a transit-friendly environment that is economically viable. Each is dependent upon the other. Challenges include identifying the appropriate mix of strategies for a given area or site.

IMPLEMENTATION

These policies and approaches should be tailored to each specific location. Land use and design require an assessment of the geographic characteristics, existing zoning requirements and parking demand. Whenever possible, incentive-based strategies and programs using a combination of parking management and transit/TOD supportive policies are critical for the development of an appropriate parking management program.

New and Increased Transit Service

Transit improvements such as the construction of rail lines and other high capacity services, new service, increasing hours of operation, increasing frequency of service and developing service to attract specific target groups help transit compete with the automobile. New and increased transit combined with parking policies can be used to achieve specific mode split and transportation objectives as described in the following examples:

Example: Lloyd District

The Lloyd District (Williams, 2006) worked with the City of Portland and Tri-Met to develop transit improvements and incentives with a parking management program. This included:

Transit

- ☐ Development of transit oriented development guidelines.
- ☐ Establishment of new direct bus route connecting homes with destinations in the Lloyd District.
- ☐ Agreement to purchase annual employee transit passes through the establishment of the Lloyd District Passport Program.
- ☐ Revenue sharing of transit pass sales.

Parking

- ☐ Elimination of free commuter parking.
- ☐ Development of aggressive maximum ratios.
- ☐ Restrictions on future development of surface parking lots.

- Restrictions on parking near the MAX light rail station and development of transit oriented guidelines.
- Elimination of free on-street parking, installation of parking meters and development of parking meter revenue sharing plan.

Before the start of this program the transit share was 8 percent. By 1997, the transit mode split increased to 21 percent. At the end of 2005, the transit share rose to 41 percent.

The Lloyd District has created over 1.3 million square feet of new public/private development, reduced commercial office vacancy rate from 12 percent (2001) to 3 percent, decreased parking from 3.5 spaces per 1,000 square feet to 1.95, and removed 1,433 commute vehicles with an estimated savings of over $35 million in parking development costs (estimated based upon a construction cost of $25,000 per space in the Lloyd District).

Carsharing: Reducing Demand for Parking

Carsharing programs provide participants with access to a fleet of centrally owned and maintained vehicles located near residences, workplaces, or transit hubs. Members typically reserve shared vehicles for a specific timeframe and pay for use through some combination of hourly, overhead, and mileage-based rates.

Implementation of carsharing offers compelling parking management benefits. First, by distributing the fixed costs of car ownership into the marginal cost of every trip made, carsharing reduces the total number of trips made by participants. Secondly, by offering an alternative to individual car ownership, carsharing programs have helped participants eliminate one or more existing household vehicles and forego the purchase of additional vehicles (Millard-Ball, et al. 2005). By increasing the number of users per vehicle and encouraging more frequent use throughout the day, carsharing programs directly reduce parking demand while preserving the convenience and flexibility of automobile use for participants.

Local governments can participate in carsharing programs in a variety of ways. In some cases, local jurisdictions can use car sharing to reduce the number of fleet vehicles. They may also provide marketing, administrative or start-up funds for this type of program. Local jurisdictions can also become involved in finding or financing parking spaces for carsharing programs. Finally, local jurisdictions can allow the use of carsharing programs to reduce the parking requirement or as a project mitigation measure for new development projects (Millard-Ball et al, 2005).

The US Green Building Council (USGBC) has included carsharing as an element of LEED certification under alternative transportation options. One LEED certification point for alternative transportation, parking capacity (SSc4.4) will be granted for a development if employees and/or residents are provided memberships in a carshare program and the following conditions are met (LEED 2007):

1. The contract is for at least 2 years, AND
2. Preferred parking is provided for the carshare vehicle(s), AND
3. The available cars are capable of servicing 5% of the employees, AND
4. The calculations/assumptions behind the estimates of customers served per car are found by the certification reviewers within a margin of error less than 5%.

Long popular in Europe, carsharing is now gaining popularity in urban areas throughout the United States. In 2004, operators claimed more than 60,000 members in the United States and 11,000 members in Canada (Millard-Ball et al, 2005). Three major carsharing providers currently serve the San Francisco Bay Area and are continuing expansion of their fleet, services, and membership. The non-profit City Carshare, founded in 2001, was joined by for-profits Zipcar and Flexcar in 2005 (Cabanatuan, 2007). While all three employ an hourly rate scheme, City Carshare also charges a coupled per-mile fee for every trip. Each provider employs some form of variable pricing based on peak vs. non-peak hours and type of vehicle, and both Zipcar and Flexcar offer an array of pre-paid monthly plans.

Rick Hutchinson, chief executive officer for City Carshare, has estimated that about 13,000 people actively participate in Bay Area car-sharing operations, with approximately 4,000 joining in the past year (Cabanatuan, 2007).According to the carshare operators and surveyed users themselves, the character of the average carshare member in the San Francisco Bay Area has been shifting from the purely environmentally conscious to the more economically conscious due to the practicality and expense of owning and operating a car in the Bay Area.

Combined City Carshare, Flexcar and Zipcar have fleet relationships with over 5000 private businesses, non-profit organizations and governmental agencies, including several in the Bay Area and southern California. Additionally these organizations provide carsharing services to over 40 universities nationwide, including UC Berkeley, SF State, UCLA, UC Davis, and UC San Diego.

Example: Bay Area Green Affordable Housing

Folsom/Dore Apartments, San Francisco, CA (completed 2005)

Folsom/Dore Apartments, a 98-unit urban infill affordable housing development in San Francisco's SOMA neighborhood, includes 30 parking spaces in a single-level, partially submerged garage. Four of the parking spaces are reserved for City Carshare pods.

Northgate Apartments, Oakland, CA (completed 2003)

Northgate Apartments, a 43-unit affordable housing development in North Oakland, includes a combination of compact parking spaces and hydraulic lifts reducing parking footprint by 20% or more, a carshare space and an electric car charge station.

Source: Green Affordable Housing Coalition, 2004.

Example: San Francisco Parking Requirement Reduction

The San Francisco Planning Department granted a variance to construct the 141-unit Symphony Towers apartments with only 51 spaces (rather than the required 141) in part because of the commitment for two car sharing parking spaces and the use of unbundled parking

Shoup, 2005

Example: City of Berkeley Fleet Replacement

The City of Berkeley, California retired its fleet vehicles and replaced them with carsharing vehicles saving an estimated $250,000 in the first three years of the program

KRON4, 2004; City of Berkeley, 2005

Transit- and Pedestrian- Friendly Parking Design

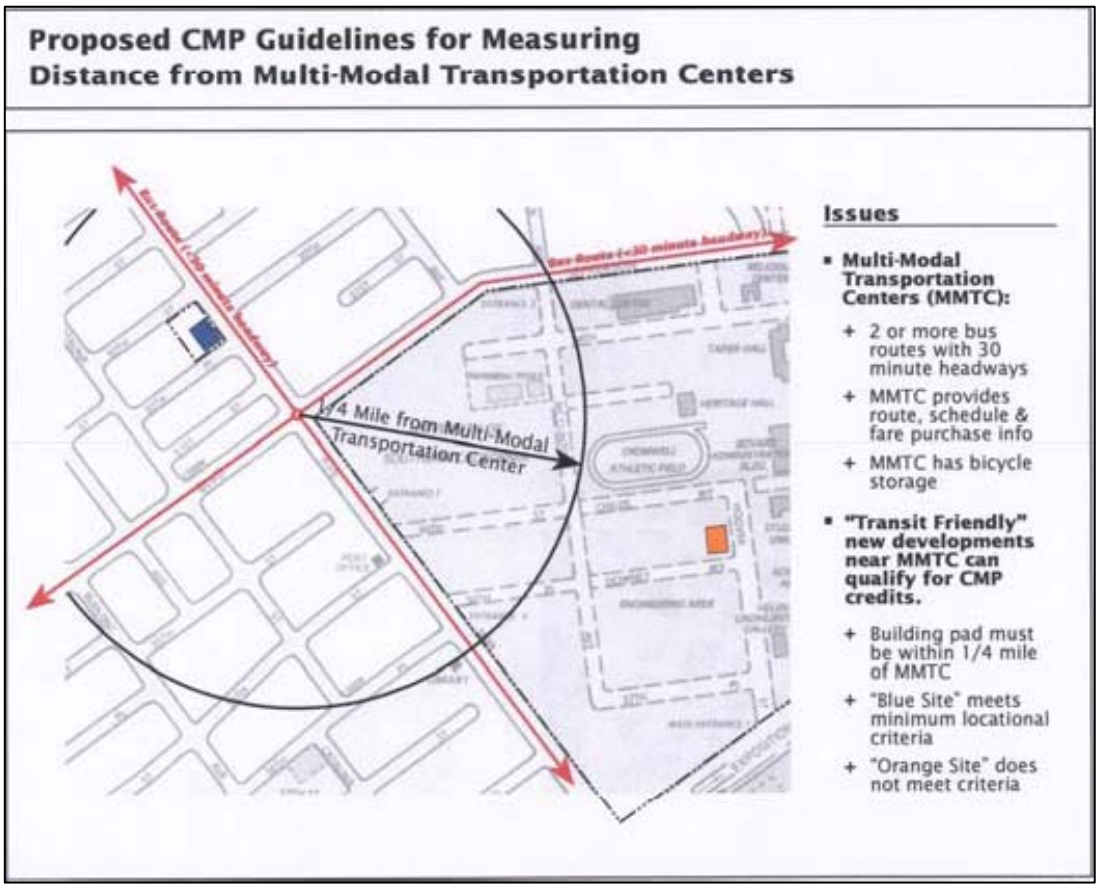
In many communities, parking lots are designed strictly for the convenience of the automobile user with no consideration for transit. In suburban communities, up to 75 percent of the site can be dedicated to surface parking (Tri-Met, 1996). It is important to consider street orientation, pedestrian entrances and links to transit service (Calgary Transit, 2006). This includes reducing the visibility of parking structures and parking lots (reducing "dead space"), creating an area with destinations that encourage walkability. Often times, these areas can create more transit and pedestrian friendly parking by either disguising parking to look like adjacent buildings or by adding retail outlets and display cases at ground level of the parking structures.

As a first step towards creating a TOD, communities can look at the feasibility of creating incentives to develop transit friendly parking design standards. At minimum, this includes locating most of the surface parking behind or to the side of buildings. This strategy can be used in more suburban locations that cannot financially justify the cost of structured and underground parking.

Example: Los Angeles County Metropolitan Transportation Authority Transit Friendly Parking Design

In Los Angeles, the Los Angeles County Metropolitan Transportation Authority developed transit friendly parking design credits as part of its congestion management program. It also included development credits for projects willing to implement parking pricing

Kodama, Willson, Walker Parking Consultants et al, 1997



Transit Overlay Zones

Transit can also be supported by the use of transit overlay zones and transit friendly parking design. In a transit overlay zone, cities modify the underlying zoning regulations to ensure that development encourages greater transit use and support efficient transit service. For example, the Transit Overlay Zone in the City of Mountain View allows for the creation of transit oriented neighborhoods that are integrated with a new light rail station.

TOD and Transit Overlay Zones allow more density while reducing parking requirements. It is directly linked to transit incentives (employer sponsored bus passes) and/or through the zoning and permitting process that require new developments, at a minimum, to meet the exiting peak hour transit mode split through the use of Transportation Demand Management (TDM) actions, allowing shared parking use and granting density bonuses for certain uses or development design.

City of Oakland – Chapter 17.100 S-15 Transit Oriented Development Zone Regulations

The S-15 zone is intended to "create areas devoted primarily to serving multiple nodes of transportation and to feature high density residential, commercial and mixed-use development to encourage a balance of pedestrian-oriented activities, transit opportunities and concentrated development." The S-15 zoning regulations are used to create high-density transit oriented development.

The S-15 zones require parking as provided in Chapter 17.116. The actual number of required parking spaces is generally determined by the Director of City Planning.

Transit Incentive Programs

Transit Incentive programs vary from passive and indirect to planned under an overall strategy mandated through local ordinance, law or promulgated rulemaking. Although broadly considered as part of Transportation Demand Management actions, incentive programs are generally implemented at the local level by transit providers (bus passes, fare free zones, fare discounts to seniors, school kids etc), individual employers or through TMAs, and through special user side subsidies from social service agencies or school districts. The most common incentive is a pass program. In areas with a parking shortage, group discount pass programs may reduce parking demand, shifting commuters from drive alone to transit.

Incentive programs for alternative modes, such as the "eco pass" concept used in Seattle WA, Boulder CO, Santa Clara County CA and Portland OR provide discounted transit pass programs that reduce parking demand. The low cost transit tickets or passes are purchased at a group discount and result in a significant increase transit ridership, reduce vehicle ownership and reduce vehicle trips. This pass program is used for groups such as cities, universities, employers, community groups and residential associations.

Example: Santa Clara Valley Transportation Authority Annual Pass Program

The Santa Clara Valley Transportation Authority offers ECO passes for businesses and residential communities. Employers

can purchase an annual ECO pass for all full-time employees at a discounted price based upon service and number of employees. Residential communities such as condominiums, apartments, townhouses, homeowner associations and community associations can also purchase ECO passes for their residents at a discounted price. Customers can use these passes on any SCVTA bus or rail line. The use of these passes saves the user on the cost of a transit pass, increases transit ridership and results in a lower demand for parking.

Example: King County Metro Residential Pass Program

In addition to successes with the use of ECO passes in Downtown Seattle, King County Metro has also experienced success in more suburban transit center environments. The Village at Overlake Station in Redmond and the Metropolitan Place at the Renton Transit Center provide bus passes for all residents. Survey results suggest that half the residents are now regular bus users (Shelton, 2003).

Universal transit pass programs that include the cost of transit for students, faculty and/or staff are used at universities such as the University of Washington, Cal Poly San Luis Obispo, University of California at Santa Barbara and the University of California at Los Angeles.

Example: UC Berkeley

In situations where short term visitor parking is in short supply, a discounted annual pass program can reduce parking demand, increase parking revenue and increase parking supply for short term visitors. University of California Berkeley (UCB) works with AC Transit in a program that allows full-time students unlimited rides on the AC Transit system. A 1997 survey revealed that 5.6 percent of UCB students used AC Transit before implementation of the class pass. In 2000, 14.1 percent of the UCB students now used AC Transit. Fare revenue increased from $84,500 per month to $125,100 per month

Nuwersoo, 2005

Example: University of Washington

> At the University of Washington, the use of transit has reduced the need for parking. In fact, despite the addition of 8,000 more people to the campus, there has been a reduction in on-campus parking spaces and a reduction in parking demand. UW has avoided building 3,600 new parking spaces, therefore saving itself $100 million in parking construction costs
>
> Nuwersoo, 2005

Downtown Free Zones

Seattle and Portland have "downtown free transit zones" that help customers "park once" and use transit to travel from parking facilities to downtown destinations. Downtown Los Angeles uses the "DASH" system, which is a downtown shuttle system that costs only 25 cents per ride.

Visitor Programs

Cities such as Washington DC, Boston MA and San Francisco CA have developed visitor programs and pass systems that encourage the use of transit.

Walkability and Wayfinding

A key consideration in the development of smart growth and TOD parking strategies is the development of a walkable environment. Often times, motorists will experience a parking shortage in the immediate vicinity of their final destination while ignoring the availability of parking spaces within a short walking distance. Encouraging the creation of comfortable walking areas and linkages between parking facilities and destinations improves customer perception and brings more parking spaces into the total parking supply.

Examples:

> Philadelphia PA, San Antonio TX, and Indianapolis IN have developed pedestrian Wayfinding systems that make it easier for visitors to walk from parking structures to major attractions.
>
> The City of Burbank (1992) used a combination of priority parking for customers, shared parking, employee parking pricing, and pedestrian improvements to revitalize its downtown area,

> creating an entertainment area with 35 restaurants, a downtown shopping center, movie theaters, anchor retailers and specialty retail shops. Pedestrian improvements create a core walkable environment and provide linkages to shared parking facilities
>
> Wilbur Smith, Kodama et al, 2005

Other Transportation Demand Management Techniques

Transportation demand management (TDM) combines a variety of techniques which induce modal choice behavior changes that reduce the demand for SOV vehicle trips and parking through the use of alternative modes. In addition to transit, TDM encourages the use of vanpooling, carpooling, walking, biking, and working at home (telecommuting), alternative work hours and other strategies. TDM programs can help reduce parking demand. Some local jurisdictions will work with businesses to reduce parking requirements in exchange for TDM programs. In Hartford, Connecticut, the parking requirement can be reduced up to 30 percent in exchange for an agreement to issue discounted carpool parking, conduct rideshare promotions, subsidize transit passes and offer shuttle service connecting off-site parking to the work site (Maryland, 2006).

MTC is actively involved in helping communities develop transportation demand management programs. This includes facilitating connectivity to transit and improving pedestrian planning in the Bay Area. The MTC Transit Connectivity Plan (Wilbur Smith et al, 2006) details strategies to make it easier to move from one transit system to another. The plan includes connectivity improvements at 21 regional transit hubs around the Bay Area. The goal of the MTC Pedestrian Districts Study (Design, Community & Environment, 2006) was to explore the use of pedestrian districts as a concept for creating better pedestrian environments in the Bay Area. Through the development of the pedestrian district typologies and real-life case studies, the study identifies the types and costs of pedestrian facilities that have the greatest impact on improving the pedestrian environment.

(Source: http://www.mtc.ca.gov/planning/bicyclespedestrians/Ped_Districts/index.htm)

City of Seattle

> The City of Seattle has a discounted carpool preferential program. Other incentive examples include preferential carpool and vanpool parking in off-street lots, guaranteed ride home programs for rideshare participants, and ride match data base

programs. Improvements to alternative modes are used to reduce parking demand for on-street parking, induce use of off street facilities, and support Transportation System Management (TSM) actions to reduce congestion and improve overall access to specific areas.

City of Alameda

Subsection 30-7-13 Reduction in Parking Requirements.

The schedule of required minimum off-street parking provided by subsection 30-7.6 may be reduced, upon approval of the Planning Board, if the applicant can demonstrate that parking demand will be reduced for the life of the project through one (1) or more of the following methods:

Transportation systems management techniques such as employees subsidies for public transit, employee subsidies for car and van pools, employer sponsored and organized car and van pools, free transit passes for shoppers in retail project, etc.

To qualify for a parking reduction, the applicant must enter into an agreement with the City which includes:

- ☐ Monitoring and enforcement provisions as approved by the Planning Board,

- ☐ Improvement of bus stops, including providing bus shelters, benches, turnout areas, etc

- ☐ Payment to the City of in lieu fees, equal to the current estimated per square foot value of the land, multiplied by the difference between the number of required and provided parking spaces, multiplied by two hundred fifty (250). In lieu fees shall only be allowed where the City can identify appropriate uses for the funds reasonably related to the project. Appropriate uses shall include but not be limited to acquisition of land for parking, construction of new parking facilities, im-

provements to existing off-street or on-street parking facilities including landscaping, installation of bicycle lanes and paths, and installation of bicycle racks and lockers. Funds raised by in lieu payments shall not be used for routine maintenance. (Ord. No. 535 N.S. §11-14Cl2; Ord. No. 1277 N.S.; Ord. No. 2375 N.S.)

City of South San Francisco

The City of South San Francisco has a Transportation Demand Management Ordinance that allows reduced parking requirements for projects that meet TDM requirements. For example, the mixed-use Bay West Cove development (EPA, 2006, City of South San Francisco, 2003) was able to reduce parking requirements by 10 percent in exchange for the implementation of TDM strategies including:

- ☐ Free parking for carpools and vanpools.
- ☐ Late-night taxi service and feeder shuttle service
- ☐ Transit subsidies for tenants
- ☐ Guaranteed ride home program
- ☐ Designated transportation coordinator and On-site project amenities
- ☐ Parking charges of at least $20 per month for employee spaces.

City of Pasadena

The City of Pasadena has adopted an ordinance entitled "Established Trip Reduction Standards in Specified Developments" that encourages the use of transportation modes including public transit, vanpools, carpools and bicycles and alternative work hours. The ordinance requires that:

Projects that exceed 25,000 square feet must meet the following requirements.

- ☐ A minimum 10 percent of employee parking must be designated for carpool and vanpool vehicles.
- ☐ Bicycle parking shall be provided near the employee entrance.
- ☐ Transportation information at a location seen by the greatest number of employees.

Projects over 100,000 square feet must meet the above requirements and the following additional requirements.

- ☐ Carpool and vanpool loading area.
- ☐ Connecting sidewalks

Section II: Changing Parking Regulations on Development

DEFINITION

Off-street parking requirements are standards established by cities that require construction of parking for each use. Parking requirements can vary according to use, location and characteristics of each community. Conventional parking regulations support auto oriented design and are designed to prevent spillover onto public streets and adjacent properties. According to a survey of over 90 percent of the local jurisdictions in the South Coast Air Basin (Kodama, Willson & Francis, 1996), municipalities provided the follow reasons for their off-street parking requirements:

- Ensure an adequate number of spaces (35 percent)
- Avoid spillover onto local streets (28 percent)
- Avoid spillover on adjacent neighborhoods and property (7 percent)
- Improve traffic circulation (14 percent).

Despite the fact that ordinances and parking reference materials sometimes assume that conventional parking requirements that can be transferred from place to place, a context specific approach to setting parking requirements is preferable. Parking demand varies significantly depending on local circumstances. The amount of parking required for use varies depending on a variety of factors. The following table is a sample of parking requirements.

Sample Parking Requirements

City	*Office*	*Residential*	*Retail*	*Restaurants*	*Comments*
Berkeley	1.5/1,000 sq ft	1/unit (1-4 units) 1/3 units (5 or more units)	n/a	1/300 sq ft	Shared use within 1,500 feet; Parking reductions allowed; requirement varies by district
Burbank	3/1,000 sq ft	varies	3.3/1,000 sq ft	5/1,000 sq ft	Exception for the Central Business District

City	*Office*	*Residential*	*Retail*	*Restaurants*	*Comments*
Los Angeles	1/500 sq ft	1 to 2/ unit	4/ 1,000 sq ft	1/ 100 sq ft	Exceptions and variances
Oakland	n/a	0 to 2/ unit	0	0 to 1/ 200 sq ft	50% reduction via conditional use permit process
Pasadena	3/1,000 sq ft	1 per unit (less than 650 sq ft) 1.5 to 2.0/unit (more than 650 sq ft)	3-4/1,000 sq ft	4-10/1,000 sq ft	Reduction for TOD and CBD areas
Sacramento	1/400 to 1/275 sq ft	0 to 1.5/ unit	0 (less than 5,200 sq ft; 1 / 250 to 400 sq ft	1/ 3 seats	Reduced minimum, maximum within CBD regulated area
San Diego	2.9 to 5.0/ 1,000 sq ft	1 to 2 spaces/ unit 0.75 to 2.5 per unit	1.0 to 6.5/ 1,000 sq ft	1.0 to 25.0/ 1,000 sq ft	Reduced minimum within a transit area and maximum by zone
San Francisco	1/ 1,000 sq ft	1/unit 1/ 4 units	1/ 1,000 sq ft	1/ 200 sq ft	Exceptions
San Jose - Downtown	1/ 360 sq ft	1/ unit	0	n/a	
Seattle	1/ 350 to 1,000 sq ft	0.167 to 1.5/ unit; 1/unit SFH	n/a	1/ 200 sq ft	Exceptions

Source: City municipal codes, 2006

ISSUES

Off-street parking requirements in local municipal codes directly affect parking supply, parking pricing possibilities, urban design, and development feasibility. While minimum off-street parking requirements may address legitimate concerns regarding spillover and neighborhood impacts, it can work against creating successful parking policies for transit-oriented districts. Minimum parking requirements may result in an oversupply of parking (Willson, 1995) and can create a "dead zone" of empty parking spaces in the middle of a commercial district or neighborhood (US EPA, 2006). An oversupply of parking can result in free commuter parking, more auto use, lower site density, higher land use consumption, lower land values and less use of alternative modes.

In many cases, planners may rely upon neighboring cities or national handbooks to determine parking requirements (Kodama, Willson, & Francis, 1996) rather than conducting a parking study to determine the actual utilization. Often times, these parking requirements may be based upon peak parking demands for a specific use, thus resulting in an oversupply of parking throughout most of the day or year. Too often, the use of transit as a means to reduce parking demand is underestimated.

Linking a reduction in parking requirements to transit policy is an important first step towards developing smart growth/TOD friendly parking policies. California authorizes variances from parking requirements to encourage the use of transit (White, 1999) (See Appendix A California Government Code 65906.5). For example, the City of Pasadena reduces parking requirements in TOD areas (see example after this section).

In California, Oregon and Washington, downtowns such as San Francisco, Oakland, Portland, Seattle, and Sacramento do not require commercial development to provide any off-street parking. Cities such as Los Angeles and Vancouver are reducing minimum parking requirements in their downtowns (Wilbur Smith et al, 2005). Smaller cities are also reducing parking requirements. Lower parking requirements have already been introduced in downtowns in San Rafael and Novato. In another example, Petaluma in Sonoma County recently adopted major revisions to its parking standards, as part of a wider shift to new parking policies. These include the eventual abolition of minimum parking requirements altogether, and the adoption of extensive design standards to ensure that parking does not impact the pedestrian environment (Nelson, Nygaard 2004).

Off-street parking policies can limit the ability to create effective parking pricing programs, affect urban design, and make new development more costly. Therefore,

it can be acceptable to reduce or eliminate parking requirements in areas with development opportunities that may provide a better use of resources, in locations with shared parking opportunities to handle peak parking demand and in communities with a highly developed transit system that provides viable alternatives that reduce parking demand.

IMPLEMENTATION

To address these concerns, communities should consider reducing or eliminating the off-street parking requirements within transit-oriented or other dense, mixed-use districts. In deciding how much to reduce the requirements or whether to eliminate them entirely, communities should consider the effect of providing parking on development feasibility. This is especially important in locations with high land costs or community preservation issues (protection of historical buildings, community character, aesthetics and environmental concerns). The reduction or elimination of off-street parking requirements works best in areas with high-quality transit service, parking pricing and a walkable environment. This reduces the demand for parking and impact of spillover parking into a neighborhood.

Considerations for Reduction or Elimination of Parking Requirements

Eliminate or reduce off-street parking requirement	Economic Vitality Better use of land Parking occupancy study Transit and walkable environment Parking pricing

To reduce, develop demand-based or eliminate parking requirements, a community will need to examine economic issues, site and neighborhood characteristics, location features, and market issues. Eliminating or reducing parking can help developers to increase the economic value of a project. The reduction of parking requirements as part of the adaptive reuse ordinance in Downtown Los Angeles was considered an essential part of their redevelopment efforts resulting in the conversion of existing obsolete buildings that do not meet current minimum parking requirements into residential uses without adding any additional parking. Since 1999, this has resulted in the completion of over 6,000 housing units, with an additional 4,000 units in the planning process (Los Angeles, 2006).

The community will also need to examine parking occupancy. Cities must look at parking demand and conduct a parking occupancy studies to examine the feasibility of reducing minimum parking requirements in their downtowns.

It is very important to tailor the approach to the conditions in each place. The key is to combine TOD with parking policies and develop the right mix of strategies, recognizing that each community must go through its own process and select the most appropriate tools and standards to move forward. The reduction in the amount of parking spaces can be linked to its proximity to transit and good pedestrian infrastructure. This combination of a reduction in parking and access to transit increases value and retail activity in a station area. A 1993 study (Arrington, 1995)) found that the assessed value of station area properties in Portland increased by 112 percent to 491 percent from 1980 to 1991 (compared the national average of 67.5 percent). A 1992 study (Krieger & Steward) found that approximately 61 percent of businesses located at downtown Atlanta stations reported an increase in monthly sales volumes during the first year of transit system operations.

Even when areas that do not anticipate a significant level of new development, revised parking policies can be important in ensuring that changes of use or minor infill projects contribute to local goals such as traffic reduction, or the enhancement of the pedestrian environment. These policies can be implemented smaller communities interested in preserving open space, preserving historic buildings or better utilizing existing land and resources. For example, Sausalito allows parking requirements to be reduced or waived to preserve historic structures, take advantage of shared parking. Corte Madera in Marin County allows for the use of landscape reserves that allow developers to set aside land that can be converted to parking if demand is higher than expected. This land can be used as an attractive amenity such as a park or plaza unless it is needed to accommodate additional parking demand. (Nelson Nygaard, 2004).

Developing TOD Friendly Parking Requirements

Current	*Step One*	*Step Two*
Parking requirements	Demand-based parking requirements based upon local parking utilization study	Elimination of minimum parking requirements or establishment of parking maximum linked with transit, walking and parking pricing.

The following are examples of parking reductions.

Example: City of Pasadena TOD Parking Requirement Reduction

17.50.340 - Transit-Oriented Development (TOD)

These standards shall apply to new development projects located within 1,320 feet (1/4 mile) of a light-rail station platform. Within the Central District, these standards shall apply to the Central District Transit-Oriented Area.

Parking requirements.

A. Parking reductions for nonresidential development projects.

Office uses. For the uses offices - administrative business professional and offices - governmental, the minimum amount of required off-street parking shall be reduced by 25 percent, and this reduction shall be the maximum allowed number of parking spaces.

All other nonresidential uses. For all other nonresidential uses the minimum amount of required off-street parking shall be reduced by 10 percent, and this reduction shall be the maximum allowed number of parking spaces.

Further reduction with study. The parking requirements may be further reduced through a parking demand study and approval of a Minor Conditional Use Permit.

Exceeding allowable parking requirements. A project site may exceed the maximum allowable parking requirements in compliance with the following conditions.

Commercial off-street parking. If the parking is intended to serve as commercial off-street parking. Approval of this park-

ing shall require the granting of a Minor Conditional Use Permit in compliance with Section 17.61.050.

Shared parking. A site may exceed the maximum allowable number of parking spaces if the parking is approved to serve as shared parking in compliance with Section 17.46.050.

Joint parking. A site may exceed the maximum allowed number of parking spaces if the parking is approved to serve as joint parking.

(1) Joint parking is a type of parking that is designed to serve uses on at least two different sites.

(2) The joint parking provided shall not exceed the maximum required parking for the combined total parking requirements of the different individual sites.

Residential development projects. The following requirements apply to multi-family residential and mixed-use development projects proposing at least 48 dwelling units per acre.

Residential parking shall be a minimum of:

(1) 1 space for each unit for units with 650 square feet or less to a maximum of 1.25 spaces per unit; and

(2) 1.5 spaces for each unit for units with over 650 square feet to a maximum of 1.75 spaces per unit.

The parking requirements may be further reduced through a parking demand study and approval of a Minor Conditional Use Permit in compliance with Section 17.61.050.

The cap includes the minimum parking requirement as well as the requirement for guest parking.

City Permits for overnight parking shall not be allowed.

(1) City Permits for overnight parking on City streets shall not be issued for residential development projects built in compliance with these regulations.

(2) Residential tenants shall be advised of the unavailability of on-street overnight parking permits.

Guest parking shall be provided as required by Table 4-6 (Off-Street Parking Space Requirements). The number of guest parking shall not exceed the minimum required.

B. Development projects within the CG zoning district.

1/4 mile of the Allen Street Station. For development projects located within 1/4 mile of the Allen Street Station, multi-family uses are conditionally permitted, shall contain a minimum of 50 dwelling units, and shall have a maximum allowable density of 48 units per acre. The Conditional Use Permit shall also establish the appropriate setbacks.

Between 1/4 and 1/2 mile of the Allen Street Station. For development projects that are located between 1/4 of a mile and 1/2 mile of the Allen Street Station, and require a Conditional Use Permit for a project over 25,000 square feet of gross floor area, the additional findings identified in Subsection C., above, shall not be required, but shall be used to guide the review of the project and the development of appropriate conditions.

Further reductions. The parking requirements may be further reduced through a parking demand study and the issuance of a Minor Conditional Use Permit in compliance with Section 17.61.050.

Example: Berkeley TOD Parking Requirement Reduction

Section 23E.28.140 Required Findings for Parking Reductions under Section 23E.28.130

A. In order to approve any Administrative Use Permit or Use Permit under this chapter, the Zoning Officer or Board must make the findings required by Section 23B.28.050 and/or 23B.32.040 as applicable, in addition to any findings required in this section to the extent applicable.

B. To approve any reduction of the off-street parking spaces under Section 23E.28.130, or under other sections that refer to this section, the Zoning Officer or Zoning Adjustments Board must find that the reduction will not substantially reduce the availability of on-street parking in the vicinity of the use. The Zoning Officer or Board must find that at least one of each of the two groups of conditions below apply:

The use is located one-third of a mile or less from a Bay Area Rapid Transit (BART) station, intercity rail station or rapid bus transit stops; or

The use is located one-quarter of a mile or less from a publicly accessible parking facility, the use of which is not limited to a specific business or activity during the new use' s peak parking demand; or

A parking survey conducted under procedures set forth by the Planning Department finds that within 500 feet or less of the use, on the non-residential street where the use is located, at least two times the number of spaces requested for reduction are available through on-street parking spaces for at least two of the four hours of the new use's peak parking demand; or

The use includes one of the following neighborhood-serving uses: Retail Products Store(s), Food Service Establishments, and/or Personal/Household Service(s). These uses include, but are not limited to: Dry Cleaning and Laundry Agents, Drug Stores, Food Products Stores, Household Items Repair Shops, and/or Laundromats; and

The parking requirement modification will meet the purposes of the district related to improvement and support for alterna-

tive transportation, pedestrian improvements and activity, or similar policies; or

There are other factors, such as alternative transportation demand management strategies or policies in place, which will reduce the parking demand generated by the use.

C. To approve any modification of the parking requirements, unrelated to the number of spaces, under Section 23E.28.130, the Zoning Officer or Zoning Adjustments Board must find that the parking requirement modification allows the continued use of an existing parking supply and that meeting the parking requirements is not financially feasible or practical. (Ord. 6856-NS § 7 (part), 2005)

San Fernando Valley TOD Parking Requirement Reduction

The Los Angeles County Metropolitan Transportation Authority (LACMTA) recently built the 14.2 mile Bus Rapid Transit (BRT) "Orange" line in the San Fernando Valley area of the City of Los Angeles. The BRT Orange Line connects the mature suburbs and urbanized area of San Fernando Valley with the North Hollywood Metro Red line subway station. The system includes 13 stations serving major activity centers including North Hollywood, the Van Nuys Civic Center, Pierce College, and Valley College, with connections to high density commercial development along Ventura Boulevard.

The dedicated busway project reduces travel times from 55 minutes to 30 minutes for bus riders in the corridor. Employment in the corridor totals 58,000 with over 17,000 employees in the Warner Center area at the western terminus of the line. While much of the housing in the corridor is single-family, 3 to 4-story multi-family housing tends to be clustered along major arterials and near station areas, there is an average population density of 8,900 per square mile in the station areas.

The City of Los Angeles General Plan Framework designates existing activity centers – of which there are four in the corridor -- as focal points for future growth. The city's policies also call

for concentrating growth within one-quarter mile of transit stations and creating a pedestrian oriented environment in these areas. Community plans covering the corridor recognize the potential for additional commercial, residential, and mixed-use development in transit station areas, but also emphasize appropriate buffering and transition to existing single-family neighborhoods. The general plan as well as specific plans for the corridor allow for a phased reduction in parking requirements as development increases and transit service improves near the transit stations

USDOT, FTA, 2004

Other Examples:

Olympia, Washington allows a 40 percent reduction in parking in its Downtown core.

Montgomery County Maryland reduces parking requirements by as much as 20 percent (EPA, 2006).

Households that rent their homes own 28% fewer vehicles than owner occupied units. This means that less parking generally needs to be provided in multi-family rental units where parking can easily be shared between different uses. Larkspur already provides a parking reduction for rental units (Nelson-Nygaard, 2004).

The County of Los Angeles transit-oriented development ordinance allows for a 40% reduction in parking requirements near transit stations.

In Miami, Florida, Coconut Grove developers and property owners have a flexible parking requirement that allows for three choices: provide off-street parking, lease off-site spaces or pay an in-lieu fee of $50 per space US EPA and Coconut Grove Chamber of Commerce 2006).

Berkeley has a transit first policy and several award winning TOD projects. This includes projects that emphasize the pedes-

trian environment and are located near transit stations. They have car-lift systems to maximize use of parking garages, ground floor retail and commercial, and housing (affordable and market rate).

Berkeley TOD Examples

Project	*Lot Size (square feet)*	*Units (apartments)*	*Density (acre)*	*Parking Spaces*	*Commercial Space (square feet)*	*Amenities*
Bachenheimer (2004)	12,400	44 (7 low-income)	155 units	30	3,000 Office, retail	Car-lifts
Fine Arts (2004)	26,000	100 (20 low-income)	168 units	55	12,000 Theater, retail café	Car-lifts
Gaia (2004)	14,850	91 (19 low-income)	267 units	42	12,000	Car-lifts
Touriel (2004)	7,000	35	218 units	8	2,400 Florist	Car-lifts

Source: Panoramic Interests. 2006

- Vancouver, British Columbia allows parking reductions ranging from 14 percent to 28 percent in multifamily zones near major transit stations.
- City of Long Beach allows for parking reductions up to 25 percent for new development located within 600 feet of a Blue Line transit station in the Long Beach Boulevard Planned Development District (City of Long Beach, 2005).

Parking Maximums

To minimize the impact of off-street parking, some jurisdictions allow the development of only a certain amount of off-street parking for any development (maximum). In Portland, Oregon (2006) the parking maximum limits the number of spaces, promotes more efficient use of land, enhances urban form, encourages the use of alternative modes, provides for better pedestrian movement and protects air and water quality. In Cambridge, Massachusetts (2006), parking maximums are used because they want adequate parking facilities to meet the "reasonable" needs of all building and land users without regulations that unnecessarily encourage automobile usage.

Most cities link parking maximums with the availability of alternative modes. Cities such as Portland OR, San Diego CA, Bellevue WA, Boston MA, Cambridge MA, Toronto, Canada and San Francisco CA have established maximum parking requirements for new development as part of "transit first" or auto trip reduction policies and goals. Many cities have established parking maximums based upon a parking utilization study rather than relying on parking ratios based upon national standards. Portland OR, Bend OR and Hood River OR have taken this approach.

Parking Maximums

City	Office	Residential	Retail	Restaurants	Comments
Downtown Bellevue WA	2.0 min to 2.7 max/ 1,000 sq ft	0 to 2.0/unit	3.3 min to 5.0 max/ 1,000 sq ft	0 to 15/ 1,000 sq ft	Separate requirements for special and overlay districts
Cambridge MA	1/400 min to 1/1,000 max sq ft	1/unit	1/250 min to 1/1,800 max sq ft	1/ 2.5 min to 1/ 15 max seats	Minimum and maximums; 4 areas
Portland OR	2/1,000 sq ft 1/294 sq ft	1/unit 0.5/unit (four plus)	1/500 sq ft or 1/196 sq ft	1/250 sq ft or 1/63 sq ft	Maximum is set by zone; standard A or B
Sacramento	1/275 sq ft; 1/500 sq ft in CBD; exemptions for redevelopment projects	0 to 1.5/ unit	0 (less than 5,200 sq ft; 1 / 250 to 400 sq ft	1/ 3 seats	Minimum, maximum w/ special CBD regulations
San Diego	5.0/ 1,000 sq ft	2.5 per unit	6.5/ 1,000 sq ft	25.0/ 1,000 sq ft	Minimum, minimum within a transit area and maximum by zone
San Francisco	7% of gross floor area	1/ 2 units	1/ 1,000 sq ft	1/ 200 sq ft	Section 151.1 maximums in downtown and

					C-3 Districts

Portland, Oregon Maximum Parking Requirements

The City of Portland, Oregon has established maximum parking requirements for new development in each central business district. There is also a parking maximum for development across the entire Portland metro area.

In Portland, parking maximums are set based upon the availability of transit service. Lower maximums are set based upon a ¼ mile walk from a frequently served bus stop or ½ mile walk from a transit station. Therefore, parking maximums are lower in central business districts and downtown due to the availability of alternative modes (transit). The parking maximum in the central downtown core is 0.7 per 1,000 square feet up to 2.5 in adjacent business districts. In more suburban areas with limited or no transit service, the parking maximum is set as high as 3.4 per 1,000 square feet. This ratio is adjusted every five to seven years based upon available transit service in an area.

Parking maximums are also used as part of Portland's historic preservation parking policy. Older buildings have parking rights up a maximum entitlement that can be combined with other uses. This creates a market for transferable parking rights and is used for the development of parking facilities that can combine parking rights of multiple buildings (such as a hotel, retail shops and a historic office building).

Portland has no requirement for residential parking within its Central City area and imposes a residential parking maximum of 1.35 stalls per unit. Financial institutions are providing the necessary financing to make these Portland projects feasible, with an average rate of residential occupancy in downtown Portland at 97 percent (EPA, 2006).

Portland does have minimum parking requirements for some uses. However, there is no minimum parking requirement for sites located less than 500 feet from a transit street with 20-minute peak hour service (Portland, 2006).

Shared Parking

Shared parking is based upon the concept of using the same parking spaces for two or more different land uses at different times. Cities typically have extensive informal shared parking arrangements, such as street parking and small commercial

lots. For example, many businesses or government offices experience their peak business during normal daytime business hours on weekdays, while restaurants and bars peak in the evening hours and on weekends. This presents an opportunity for shared parking arrangements.

Shared parking can significantly improve the efficiency of existing parking, and may allow new infill development to occur without the need for additional parking. Recent innovations and technology increase the cost effectiveness and use of smaller parking lots through better information systems, wayfinding, automated parking fee systems, and pay stations. Shared parking can significantly improve the economics of constructing new parking by providing greater turnover in the facility — rather than one user per day a facility may service multiple users. If parking charges exist, this turnover can increase the ability to finance the facility. Allowing for shared parking arrangements significantly reduces the amount of land devoted to parking and, in so doing, creates more opportunities for mixed use, creative site planning and landscaping. In addition to revisions to local zoning codes to enable shared parking, shared parking arrangements can be implemented through shared parking agreements between individual developers or the construction of public parking facilities. In some cases, shared parking can be a formal or informal agreement among different peak users on different days.

Some local jurisdictions incorporate language in local ordinances to permit and even encourage shared parking. These jurisdictions allow shared parking to meet minimum parking requirements for uses located within the same lot or building and also permit off-site shared parking arrangements to meet on-site parking requirements for complementary uses within a defined area. These location requirements are typically based on acceptable walking distances.

Example: Shared Parking – Montgomery County, Maryland

> The Montgomery County Zoning Ordinance allows for shared parking when any land or building is under the same ownership or under a joint use agreement and is used for 2 or more purposes. The uses being served by the shared parking arrangement must be within a 500 feet walking distance of the shared parking facility. The following is a generalized example (Zimbler, 2002).
>
> The calculations are based on a development project with general retail and office uses. The retail use has a gross floor

area of 100,000 square feet and the office use has a gross floor area of 100,000 square feet. The development is located in the designated Southern Area of Montgomery County and is located 1,000 feet from a Metro station.

Given this location, the minimum amount of parking normally required for a retail use is 5 spaces per 1,000 square feet gross floor area and the minimum requirement for an office use is 2.1 spaces per 1,000 square feet gross floor area. The following table summarizes the calculations. The "percentage of parking requirement column" is based on the parking credit schedule in the Montgomery County Zoning Ordinance

For this example, the minimum parking requirement for the shared parking arrangement is 521 spaces since that is the maximum number of spaces across the five time periods. This is significantly less than what would otherwise be required, 710 spaces, if shared parking were not permitted—a 26 percent reduction in the minimum parking requirement.

	Office Use			Retail Use			Parking Requirement by Time Period
	Minimum Parking Requirement	Percentage of Parking Requirement	Adjusted Parking Requirement	Minimum Parking Requirement	Percentage of Parking Requirement	Adjusted Parking Requirement	
Weekday Daytime	210	100%	210	500	60%	300	510
Weekday Evening	210	10%	21	500	90%	450	471
Weekend Daytime	210	10%	21	500	100%	500	521
Weekend Evening	210	5%	10.5	500	70%	350	360.5
Nighttime	210	5%	10.5	500	5%	25	35.5

Example: City of Berkeley Shared Parking Code

Section 23D.12.060 Joint Use of Off-street Parking Spaces

A. The Zoning Officer may approve an AUP to allow a Joint Use Parking Agreement to satisfy off-street parking space requirements, if all of the following findings are made:

1. The off-street parking spaces designated for joint use are located within 800 feet of the use to be served; and

2. The times demanded for these parking spaces will not conflict substantially between the use offering the spaces and the use to be served; and

3. The off-street parking spaces designated for joint use are not otherwise committed to satisfying the parking requirements for some other use at similar times.

B. The Board may approve a Use Permit authorizing the off-street parking requirements for offices in R-4 or R-5 Districts to be supplied jointly with off-street parking facilities provided for multiple dwellings, if it finds:

1. No more than 20 percent of the off-street parking spaces required for the multiple dwelling use will serve as required off-street parking for offices; and

2. The off-street parking spaces to be jointly used are located on the same lot as the offices which they are to serve, or on property under the same ownership within 300 feet from such offices.

C. A statement shall be recorded in the Office of the County Recorder that restricts the use of the property and designates the off-street parking that is to serve the other property. The deed restrictions shall state that the property cannot be used so as to prevent the use of the parking that is being provided in compliance with the requirements of the City, unless the restriction is removed by the City. Upon submission of satisfactory evidence either that other parking space meeting the requirements of this Ordinance has been provided or that the building or use has been removed or altered in use so as to not longer require the parking space, the City shall remove the restriction from the property. (Ord. 6794-NS § 1 (part), 2004: Ord. 6478-NS § 4 (part), 1999)

Section III: Changing the Price of Parking

Parking pricing concepts should be considered as an integral part of any comprehensive parking policy approach. Parking pricing is a powerful tool that can affect parking occupancy and turnover and can generate revenue for parking of community improvements. The most desirable locations in California often have parking charges.

Parking pricing can induce greater turnover of the most convenient spaces, increase parking availability, and generate revenue to fund community improvements. Parking pricing is most effective when it is combined with a comprehensive package of incentives for alternatives modes, such as rail improvements, express or bus rapid transit, shuttle services, bus service, pedestrian improvements.

Examples:

> In 1999, Berkeley raised its all-day parking rates in public facilities resulting in a rate increase for private off-street parking facilities, a shift to alternative modes and a decrease in all-day parking demand. Currently, Berkeley, California is considering rate changes on-street and off-street with an eye to reducing meter feeding and shifting additional long term parkers from on-street to available off-street capacity or to alternative modes.

On-street Parking Pricing

On-street parking pricing is an integral park of parking pricing, since on-street parking conditions often drive off-street policy. The development of a successful on-street parking management system relies upon the development of a coordinated and comprehensive parking management system that prioritizes parking spaces for specific users.

On-street parking pricing and management can drive off-street policy. If the on-street price is too low, demand for these spaces will exceed supply, resulting in a shortage of parking spaces. On-street parking pricing works best when combined with a high level of transit service.

Examples:

In Portland OR, there is a standardized approach that creates a "core area parking zone" with 90-minute meters. Portland has also established special use zone areas that allow for longer time stays based upon users and priority parkers. Parking located near Portland State University is standardized with 3-hour time limits to allow for a longer stay by its part-time student population.

Example: Redwood City On-Street Parking

Redwood City has taken the concept a step further, approving enabling ordinance that uses parking utilization as the key for on-street pricing policy. The municipal code (section 20.120) allows for the periodic adjustment of the downtown meter rates based upon a target parking utilization rate of 85 percent. It also includes the creation of a parking database and provision of an annual parking utilization study to adjust parking rates. The parking manager has the authority to adjust rates up or down twenty five cents based upon the target occupancy rate of 85 percent. The hourly meter rate shall not exceed $1.50.

Variable Rate Parking Pricing

Variable rate parking pricing can be used to maximize parking resources, encourage the use of alternative modes and discourage single occupant vehicles. Variable rate parking pricing can be used in areas with seasonal or special event parking considerations. This may also be used by cities to maintain desired occupancy rates (for example – charge a higher fee during events near special event centers or during special shopping seasons). It can also be used to encourage turnover and increase short term parking supply.

Example: New York

In New York, the variable rate parking pricing is used for on-street parking. The Mid-Town Commercial Parking Pricing Program sets on-street rates for multi-space muni-meters (pay and display) at $2 for one hour, $5 for two hours, $9 for three hours and $12 for four hours. Initial results from the program indicated a decrease in average parking time from 4 to 6 hours to 90 minutes and a reduction in occupancy rates from 120 percent to 85 percent (New York, 2006). New York pay station custom-

ers can also use credit cards or NYC Parking Cards to pay for parking. Estimated revenue from this program increased from $3.527 million (FY2004) to $6.42 million (FY2006).

Coordinated Off-street and On-street Pricing

Off-street and on-street parking prices may also be tied together. At the same time, off-street short term parking rates are coordinated with on-street hourly rates. This encourages commuters to use alternative modes while still providing short term parking for customers.

Example: Aspen Colorado

Aspen, Colorado (1999) balances on-street and off-street parking pricing policies. Aspen changed its parking pricing structure to increase the availability of prime on-street parking (short-term customers) and increase the utilization of its off-street municipal parking structures (long-term visitors and employees). Funding from parking is used to pay for parking improvements, improve streetscape and encourage the use of alternative modes (Aspen 1999).

Unbundled Parking

A lease is unbundled when there is a separate charge for parking and there is the flexibility to vary the number of spaces (Kodama, Willson, & Francis, 1996; Kodama & Maetani, 1998). Bundled parking is absorbed into tenant leases and hides the cost of parking. It hides the cost of parking from the user and is absorbed into the lease.

For example, rather than renting an apartment with two parking spaces for $1,000 per month, the apartment would rent for $800 per month, plus $100 per month for each parking space. Or, renters are offered a discount to use fewer than average parking spaces. An apartment or office might rent for $1,000 per month with two "free" parking spaces, but renters using only one space receive a $75 monthly discount.

Generally, parking spaces are generally bundled into the leases and are a hidden cost. Unbundling parking is an essential first step towards getting people to understand the economic cost of parking. Without unbundled parking, tenants often assume that parking is free. Unbundled parking is a critical first step necessary to implement parking pricing policies and parking cash-out. It gives the user an op-

portunity to opt out of parking and make decisions based upon the price of parking as a commodity rather than a free good. It gives people the option to compare parking and driving costs with transit, sharing a ride, walking or biking.

Free parking	*Unbundled parking*	*Parking Pricing*	*Parking Cash-out*
There is no consumer cost for parking and parking is offered as a free amenity. Parking costs are hidden.	This is the critical first step towards parking pricing. It helps the consumer to recognize the cost and value of parking.	Generally refers to the level of parking charge at an hourly, daily, monthly or annual rate. The market rate of parking is posted to the consumer.	The consumer is offered a choice of a parking space or the out-of-pocket cash-equivalent of the parking space.

Example: San Francisco: Central Waterfront Plan

> The Central Waterfront Plan includes the elimination of dwelling unit density restrictions, designates residential as a principally permitted use, limits retail and office uses to the first and second stories, eliminates minimum parking requirements and requires unbundled parking from the rental or sale of residential uses.

- San Francisco housing units with off-street parking bundled into the unit sell for 11 percent to 12 percent more than units without parking (Jia and Wachs, 1998),

- The Los Angeles County Metropolitan Transportation Authority developed a policy to give congestion management program credits to projects willing to unbundle parking (Kodama, Willson, Francis et al, 1997).

Parking Cash-Out

Parking cash-out allows employees to choose between a parking subsidy or the out-of-pocket equivalent cost of the parking space. Employees may choose to apply the money towards their parking space or make arrangements to use a lower cost alternative mode and keep the cash. A study on parking cash-out summarized results from seven work sites and estimated a 26 percent reduction in parking demand (Shoup, 1992). In an analysis of downtown Los Angeles commuters, Shoup and Willson (1992) estimated that parking charges can reduce parking demand by

25 percent and parking cash-out can reduce parking demand by 17 percent. They estimated that significant mode shift will occur.

California AB 2109 (1992) requires parking cash-out of sites with 50 or more employees in non-attainment air quality areas who provide parking subsidies, have non-owned employee parking and can reduce parking without a financial penalty.

More recent cash-out studies by Kodama et al (1996), Shoup (1996 and 1997) and Van Hattum et al (2000) expanded the definition of cash-out and provide a more flexible and broader application. The Van Hattum study involved voluntary promotion of parking cash-out and educating employers about cash-out opportunities. Within the past ten years, many employers in Downtown Portland, Downtown San Francisco and Downtown Seattle have created effective programs that eliminate free or subsidized parking while providing employees with transit passes.

Example: Downtown Seattle Unbundled Parking and Market Driven Parking Cash-out

Downtown Seattle has parking cash-out because it has created an environment that allows businesses to cash out because it makes economic sense and serves their own self interest. Downtown Seattle has the key elements to promote cash-out including:

- ☐ Excellent transit service
- ☐ Unbundled parking leases
- ☐ Limited parking supply and parking prices
- ☐ High land values

Example: City of Santa Monica Parking Cash-Out Law

The City of Santa Monica is the only city in California that requires compliance with the parking cash-out law. The program is part of the city's Emission Reduction Plan. There are 26 employers who participate in the program, resulting in a 20 percent reduction in parking use at these employment sites. A

study conducted by Donald Shoup (1997), concluded that two Santa Monica employers who used cash-out reduced solo driving by 7 to 8 percent.

The County of Los Angeles was one of the first major employers to offer a cash-out program to its employees. This program resulted in a decrease in solo occupant drivers and allowed the County of Los Angeles to use its excess parking for other more profitable uses.

The Los Angeles County Metropolitan Transportation Authority gives congestion management program credits to projects willing to cash-out parking (Kodama, Willson, Walker Parking Consultants et al, 1997).

Section IV: Parking Management Strategies, Programs and Technology

DEFINITION

Parking management is defined as the strategic application and use for existing and planned parking spaces both on-street and at-off street facilities in a given area. Parking management is a system management tool which addresses how vehicles access, use (length of time) and egress from parking spaces. These tools include the:

- Designation of long term and short term parking.
- Payment technologies.
- Application of Intelligent Transportation Systems (ITS) technologies in facilities that accommodate & maximize use within a limited area.
- Implementation of parking demand management strategies to encourage multiple use of parking facilities.

ISSUES

The development of parking management strategies, programs and technology considers parking perceptions and attitudes, parking pricing, land use policies, community characteristics and transportation alternatives. Many people do not think about parking unless they cannot find a space or it costs too much. Generally, there is an expectation of free, abundant parking in most areas. However, developing parking policies to support TODs and Smart Growth requires a new attitude recognizes parking location, cost, supply and demand issues. It involves helping users make a choice based upon transit options and economic need.

For local jurisdictions, this changes parking planning with a new focus on capacity, price and utilization of parking system and how to best use parking resources. It requires identification of priority parking users, selection of parking areas for customers, employees and residents, and the linkage of parking, walkabilty and transit options.

Implementation

Identification of target markets for parking is an important consideration. This includes prioritizing uses of parking resources through conversion of existing long term parking to short term use. Many communities have undertaken parking assessment studies to evaluate the best means and methods to use short and long-

term spaces and facilities. This increases the productivity of existing parking spaces by increasing the number of person-trips served per spaces allows for strategies that can be designed and tailored to meet needs that can vary by area. The most effective conversions require a strategic and phased approach that includes investments in alternative modes before removal of both daily commuter parking and long-term parking at airports and rail stations.

Implementation of parking management strategies includes parking demand, supply, cost, safety and location issues. It needs to consider economic and financial feasibility issues, site characteristics, location features and compatibility with surrounding uses as well as market and regional issues.

The approach must consider the creation of a win-win program that is customized for each community. Generally, the combination of strategies should maximize economic incentives, while identify and prioritize primary and secondary target markets. It also needs to include creative employee parking programs and utilize transit options. These strategies impact land use patterns and transportation demand management actions (Kodama & Willson, 2000, Willson, 2005). The following strategies, programs and technology can enhance smart growth and TOD opportunities:

Examples

Portland, Oregon, Anchorage, Alaska and Vancouver, Washington have developed priority parker profiles and converted long term parking to short term use. Vancouver, Washington and Portland Oregon have strategically purchased land and built new public parking facilities that are used solely for short-term customer parking.

Parking Payment Technology

Rapid development in pay station technology is providing options for variable pricing, accept multiple payment mediums, more user friendly, support ITS information on parking availability to users and provide better intelligence for parking system managers. Many cities are considering pay stations that accept bills, increase parking supply and increase revenue. This new technology allows for the development of pay stations with advance pricing capabilities.

The pay stations create financial and operational database that tracks, an audit trail, real-time data and increase revenue opportunities. Pay stations allow accept credit

cards and create the ability to use on-street variable rate parking systems that allow for higher charges for longer stays or special events. Pay stations have now been implemented in many cities throughout the United States such as New York, Seattle, Portland, Long Beach, Boston, and Chicago.

Example: City of Seattle

In 2004, the City of Seattle began replacement of single space meters with a multi-space pay and display system, per space parking revenue with the same fee has increased 40 percent due to the propensity of motorists to use credit cards (62 percent of parking revenue) to purchase the maximum parking period allowed and avoid a parking ticket. In 2004, the City of Seattle began replacement of single space meters with a multi-space pay and display system. As a result, per space parking revenue with the same fee has increased 40% due to the propensity of motorists to use credit cards (62% of parking revenue) to purchase the maximum parking period allowed and avoid a parking ticket.

Cities are also beginning to experiment with cell phones and cell phone technology. They are also looking at how to use smart card technology to pay transit fares, parking fares and to purchase goods from a variety of vendors.

Example: Las Vegas, Nevada

Las Vegas has installed fifteen multi-space meters with the capability of payment by cash, coins, debit cards, and credit cards. Additional time can be purchased by using a credit or debit card over a cell phone. The motorist can program the meter to call a cell phone number when it is running out of time.

Example: Vancouver, British Columbia

The City of Vancouver has a pay for parking by phone service that is available at all 7,800 on-street parking meters. Drivers access the system by phone, proving the parking meter number and the number of minutes (up to the maximum time per-

mitted). Drivers may extend their time or receive a warning via text message.

Example: Tarragona, Spain

Tarragona Spain was one of the first cities to experiment with the use of mobile phones to make payments at parking meters. Motorists initiate this service from a mobile telephone. Once payment has been authorized, the system either issues a ticket or credits the user. This new payment method is easy, quick and secure.

Parking database

ITS technology facilitate the development of a comprehensive on-street and off-street database of parking gives local jurisdictions a more accurate assessment of parking use upon which they can develop programs that better reflect local conditions and issues. These data bases can also be used to provide the public with real-time information on parking availability at employment sites and other attractor/generators. Current efforts involve taking and evaluating regular surveys. Cities are looking at the feasibility of creating these types of database through ITS technology to gather analyze and provide real-time parking information.

Example: Downtown Seattle Parking Database

Downtown Seattle has a parking database. Downtown Seattle has limited parking (54,063 spaces) to support an employment base of 181,807 jobs. The overall central business district peak-hour occupancy rate of 76.8 percent indicates that parking is generally well used in Downtown Seattle (King County Metro, 2001). In Downtown Seattle, monthly rates vary from $38 to $275 (PSRC, 1999), with an average monthly rate of about $174 (King County Metro, 2001). Daily parking rates vary from $21.50 per day to as low as $3.00 per day, with an average at $14.39 per day.

Real-time Parking Information

Real-time parking information, guidance and wayfinding systems make it more convenient to find parking. These systems range from guidance given in the garage itself as to the location of available spaces to coordinate guidance systems that provide directions to the appropriate parking garage and guidance within that facility. Often districts have sufficient total supply of parking, but use portions of the inventory inefficiently. Some cities have electronic wayfinding guidance systems as they enter a district. Both improve traffic circulation and the efficiency of the parking system.

There are also new technology options available that can help count the use of parking spaces (entry/exit counters) and space occupancy detectors. This information can be used as a user guidance system as well as to compile statistical data about parking (occupancy, turnover, etc.). The BART stations at Pleasant Hill and Rockridge have also been testing smart parking technology that can help commuters check parking availability or reserve a parking space via telephone (Shaheen, Rodier & Seelig, 2005).

Examples

Portland International Airport, Baltimore International Airport and the Grove in Los Angeles have parking systems that use dynamic signs to communicate stall availability to motorists. The City of Santa Monica has a web-based system that the user can access to examine the availability of parking.

Example: BART

BART provides a variety of parking options for its customers. This includes reserved monthly and daily permit parking, carpool parking, midday parking, airport/long term permit parking and daily fee parking. At some high volume stations, BART uses a parking validation program. Many BART parking services are available on-line.

Section V: Parking Benefit Districts

DEFINITION

Parking Benefit Districts generally utilize revenues generated by a range of means including assessments, taxes or parking meters to provide transportation-related services, and various infrastructure/and or other improvements in order to improve the viability of the area. These districts may also use a variety of strategies to enhance the benefits derived from the revenue. Parking can be managed on an area-wide or site specific basis.

ISSUES

There are several key issues that need to be considered in developing a successful Parking Benefit District. Key stakeholders such as businesses, developers, land owners, residents and government representatives need to work together to develop goals, objectives and a plan to create a parking district. Decisions on how, where, amounts and for which items funds shall be spent on are critical elements that need to be addressed.

IMPLEMENTATION

Development of a parking benefit district begins with the involvement of key stakeholders to create a set of guiding principles that help facilitate the process and develop the rules for a parking district. The next step is to develop an action plan that establishes boundaries, specific location of parking meters, assessments and other strategies.

Typically, a parking district will collect revenues from parking meters, residential permits and other parking revenue sources. California cities such as Pasadena, Palo Alto, Beverly Hills, Riverside, Redondo Beach, Sacramento and San Diego have created parking districts that use the revenue to improve the local neighborhood. There are discussions to use the concept of parking benefit districts in residential communities. In the examples listed below, parking revenue was returned to the district to fund improvements.

Example: Old Pasadena Business Improvement District

In Old Pasadena, there are an estimated 750 on-street parking spaces and 8,000 off-street spaces. The City operates three parking structures in Old Pasadena with approximately 1,600 spaces. In these facilities, the first 90 minutes are free, with the hourly rate set at $2 and a maximum rate of $6. Vehicles that enter from 10:00 pm to 5:00 am pay a flat rate of $5 (Meyer Mohaddes, 2006).

The focus of the Old Pasadena parking system is to make the on-street parking more accessible and available for customers rather than visitors and employees. The City created a parking management program for on-street parking utilizing meters that were calibrated to eliminate "cruising" for spaces. According to the Kolozsvari and Shoup (2003) study in Old Pasadena, the city did the following:

- Gained support of merchants for installing the meters by agreeing that the revenue stays in the Old Pasadena District.
- Coordinated efforts with the Old Pasadena's Business Improvement District (BID) to create boundaries for the Old Pasadena Parking Meter Zone (PMZ).
- The City founded the Old Pasadena PMZ Advisory Board which was made up of businesses and property owners. The members provided input for parking policies and spending priorities for area's meter revenues.
- Installed parking meters to manage on-street parking supply and established a $1.00 hourly rate. Increased available parking spaces by pricing the on-street spaces.
- Allocated all of the funds to public investment in the Old Pasadena District.

- Utilized funds to purchase street furniture, trees, tree grates, and historic lighting fixtures and to maintain the area. Maintenance included daily sweeping of the streets and steam cleaning of the Colorado sidewalks,

- Conducted marketing campaign to inform shoppers of the benefits of meter revenues.

A key element of the plan was the creation of the Old Pasadena Business Improvement District (BID). Developed in partnership with the City of Pasadena, the BID reinvests parking revenues in the district. The BID Board consists of business and property owner who set spending priorities based upon the zone's parking meter revenues. The first project was the Old Pasadena Streetscape and Alleyways Project. This $5 million project updated street furniture, trees, tree grate and historic lighting fixtures. Since then, the BID has relied upon this funding source for its own street sweeping, trash collection, graffiti removal and sidewalk cleaning program.

Example: Lloyd District Meter District

The Lloyd District Meter District (Williams, et al 2005) is located just across the Willamette River from Downtown Portland. A majority of the meter revenues are allocated to transportation improvements and programs in the Lloyd District. The Lloyd District meter district includes nearly 2,000 metered stalls serving a mixed-use business center in Portland, OR. Established in 1997, revenues from the meters can be used to fund transportation improvements and programs such as:

- Extension of the Fareless Square for transit service connecting the Lloyd District and Downtown Portland;

- Operating funds for the Lloyd District Transportation Management Association; Pedestrian improvements including sidewalks, intersection crossings and lighting.

- Signage and wayfinding systems.

Downtown Tempe Community (DTC)

DTC is a non-profit business association in Tempe Arizona that is funded through a business improvement district. The DTC manages on-street parking in Tempe's central business district. DTC now manages over 95 percent of the public and private parking, including on-street parking in its service area.

Downtown Management Commission

In Boulder, Colorado, the Downtown Management Commission manages on and off-street parking. It collects parking revenues from garages, meters and in-lieu parking fees. These revenues are used to provide free universal transit passes, guaranteed home services, ridematching, bicycle parking and other benefits.

Section VI: Parking Financing

The cost of construction, operation and maintenance of parking impacts smart growth and TOD. Financing parking can be one of the most challenging parts of parking development. The development of parking is not free. Constructing parking spaces typically costs anywhere from $8,000 per space for a suburban surface parking lot to $60,000 per space for an underground parking facility (construction and land cost). Pacific Place parking garage in Downtown Seattle had a per stall cost of $61,000 (Seattle Post Intelligencer, 1998 and Washington State Department of Transportation, 1999).

To determine the cost of parking, it is important to consider the facility's annual income, operating costs, amortization rate, land costs and construction costs. The cost of parking also needs to consider the highest and best use of land. For infill locations, the opportunity cost can be very high. The Transportation and Land Coalition (2002) estimates that on-site parking spaces in the Silicon Valley could reduce the number of housing units by 25 percent or more.

DEFINITION

It is difficult to use parking user revenues to pay for the entire cost of parking facilities. In most cases, the high development costs and limited funding opportunities results in the need to identify alternative funding and financing options. There are many parking finance options, including private sector financing, bonds, grants, tax revenues or other obligations (Urban Land Institute, 2000). Some examples of creative parking financing methods are described below. This includes fee-in-lieu of parking, risk fund, bonds, tax exemptions, variable rate taxes and grants. In many cases, it can be much better to enhance existing transportation resources such as transit rather than spend funds on new parking facilities. MTC has a Station Area Planning Grant Program that funds plans for other options - local planning for housing-supportive zoning, amenities for walking, biking and transit supportive parking policies (Simpson, Bickel, Heminger and Schaufele, 2006).

ISSUES

The development of parking can be a risky and expensive proposition. Parking costs per space vary depending on a variety of conditions. The financial viability of parking (revenue and cost) involves a financial feasible assessment and a financing plan. Key issues include identification of revenue streams, development of financ-

ing options, determining construction costs, paying for operation and maintenance as well as examining alternative uses of land.

IMPLEMENTATION

Generally a financial feasibility study is conducted to determine the costs of constructing and maintaining the parking facility. The following are some financing and revenue options to build a parking facility.

Financing

Most parking structures are financed with private funds. Private financing can be 10 to 20 years and may include a variety of financing options such as variable, indexed or blend mortgages. Local jurisdictions may use public financing that can involve the use of municipal bonds. Parking revenues, lease payments, benefit assessments may be used to secure bond payments. The following are other sources of funds that can be used to pay for parking facilities.

Fee-In-Lieu

In some cities, developers are allowed to buy out of minimum parking requirements. The fee-in-lieu fee is set at a level below the cost of constructing parking spaces and can be used to fund future parking facilities. More creative cities also use this fund to pay for other transportation improvements in the project area. It can often be a favorable solution for the redevelopment of older and historic properties and can be used to develop shared parking facilities.

Example: City of Pasadena

> Pasadena has used fee-in-lieu funds to pay for various transportation improvements in Old Town Pasadena. The city created a "Parking Credit Program" that enables businesses to meet their off-street parking requirements. In 2001, it was set at $115 per space which is substantially lower than the cost to construct a parking stall. These lower charges allow a business to locate in a building which may not have the same use. This eliminates an impediment for the business moving into the building which may not have sufficient parking to meet its higher parking requirements. The intent of the City's zoning

credit is to use fees to create a pool funds to develop off-street parking (Shoup, 2005).

City of Mountain View

The City of Mountain View has an in-lieu fee program that is used on developments fronting the main streets in Downtown Mountain View. This encourages shared parking facilities, reduces the development cost of parking and makes better use of parking resources. The in-lieu fees can work with density adjustments for residential uses (Hurrell, 2006).

City of Miami, Florida

The City of Miami requires 1.5 parking spaces per unit for new apartment buildings. Parking must be provided on-site or within 500 feet of the site with the remaining parking spaces may be satisfied by the payment of a Parking Impact Fee. New retail space must provide one parking space per 300 square feet of floor area and office space requires one parking space per 400 square feet of floor area. Parking spaces must be provided on-site or within 500 feet of the site.

A parking Impact Fee (in-lieu fee) may be paid to the City of Miami Beach in lieu of providing required parking on-site, or within 1200 feet of the Site in the Miami Beach Architectural District or otherwise within 500 feet of the Site, in the following instances:

1. New construction of commercial or residential development and commercial or Residential additions to existing buildings whether attached or detached from the main structure within the Miami Beach Architectural District or a Local Historic District.

2. When an alteration or rehabilitation within an existing Structure results in an increased parking requirement.

3. New construction of 1,000 square feet or less, or additions of 1,000 square feet or less to existing buildings whether attached

or detached from the main structure may fully satisfy the parking requirement by participation in the Parking Impact Fee Program.

4. The creation or expansion of an Outdoor Cafe when created as part of new construction or outside the Architectural District or a Local Historic District.

Risk Fund

Development of a risk fund can guarantee revenue for short-term parking lot owners/operators. This is accomplished by guaranteeing owners of parking facilities a level of revenue in exchange for agreeing to provide short term parking. This can be used to encourage the use of parking resources for short term uses, discourage commuter parking and support the use of transit alternatives.

Example: Seattle, Washington

Seattle WA (2006) is using this strategy to increase short term parking supply and discourage commuter parking as part of the Alaska Way Viaduct and Seawall Replacement Mitigation Program.

Parking Occupancy Tax

Local jurisdictions may collect revenue through a parking occupancy tax. In most cases, the parking occupancy tax is a percentage of the market price of parking. These funds can be used to build additional parking facilities, transportation improvements, transit or other uses. Parking occupancy taxes are used in many communities. However, this type of tax may encourage free parking and bundled leases that allow the user to avoid paying a parking occupancy tax.

Example: San Francisco Commercial Parking Tax (www.ci.sf.ca.us)

The city of San Francisco imposes a 25% tax on all commercial parking transaction ("any rent or charge required to be paid by the user or occupant of a parking space.") Revenues are divided between the city's general revenue, public transportation and senior citizen funds.

Parking Tax by Space

Parking taxes may also be collected per space. This format collects a fee based upon the number of parking spaces. The tax is collected for both free and paid parking spaces.

Example: Vancouver

> The Greater Vancouver Transportation Authority charges a parking tax on non-residential parking the Greater Vancouver Regional District (GVRD). These funds are used for the expansion of roads and transit services in the region. The assessment is based upon a rate per square meter. The current rate is $0.78 per square meter and is collected as part of the property tax bill.

Tax Exemptions and Variable Rate Tax

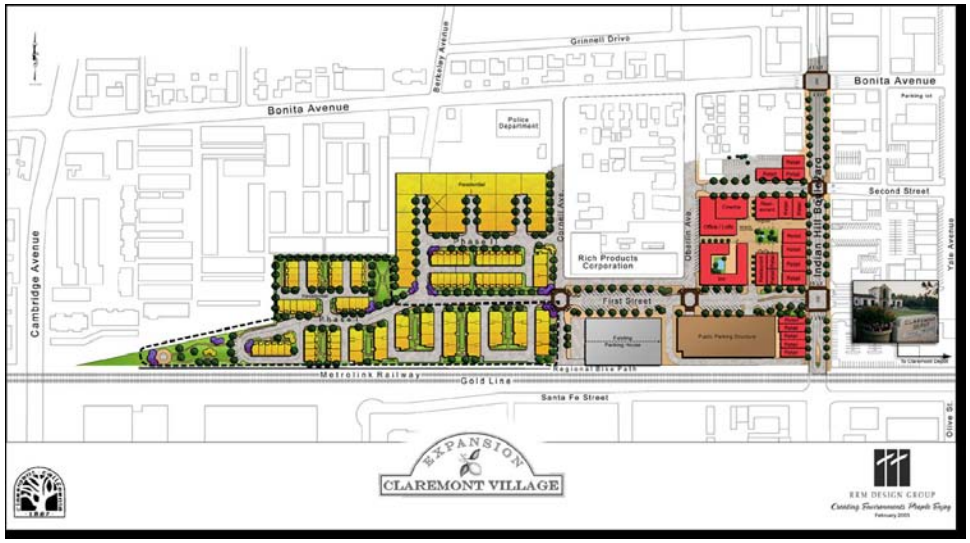
Some cities are looking at the feasibility of providing special discounts on taxes to parking owner/operators who allow access to their parking for specific priority users (such as short-term customers). They are also looking at the feasibility of a variable rate parking tax based on parking type and fee level to encourage operators to prioritize parking for specific target markets. This can be used to help provide funding to encourage the use of alternative modes.

Grants

There are various grants available that can fund planning or construction of parking facilities that can be used to support transit. In Southern California, the City of Claremont is using USDOT funds to help build a parking structure to support transit/TOD concepts.

City of Claremont, California

The City of Claremont secured funding for a 477 space parking facility that includes preferential parking for transit users and carpoolers. The city used a combination of local and FTA funds. This suburban community is developing a transit-oriented village consisting of 35 acres with over 200 new high-rise residential units with reduced parking requirements and over 150,000 square feet of retail, commercial and office space. The parking structure will be used to consolidate park-



ing, reduce surface parking, support transit-oriented development and the Claremont Intermodal Regional Transportation Center. Parking is prioritized for transit users and retail customers

Kodama, 2005

Section VII: Questions and Answers

WHAT IS PARKING MANAGEMENT?

Parking management is any technique that employs changes in parking location, cost, supply or demand to better use parking resources.

If a jurisdiction lowers their parking requirements, will developers and lending institutions participate in the project area?

There are many developers and lenders who understand the economic significance of reducing parking cost in TOD areas. These developers and lenders already factor in the reduction in parking cost in their pro forma analysis. This can result in a reduction in development costs and more revenue for the developer and the city. In other cases, developers and lenders will need to be shown the high value of similar development projects around transit and the viability of lower parking ratios. They may want a feasibility and financial study to address concerns associated with a reduction in parking ratios.

What can I do to protect residential neighborhoods from spillover parking issues?

You may protect residential neighborhoods from spillover parking issues by specific uses. For example, time restrictions in residential neighborhoods discourage all-day commuter parking. You may also protect residential neighborhoods by creating residential permit parking programs. Another option is to set up a residential parking district that takes on-street parking revenue in a residential community and uses these funds for specific for community improvements. In all these cases, it is important to empower the community and include them in the decision making process.

Why is it important to create incentives to unbundling parking costs from rents?

If parking is bundled into a lease, the tenants and users assume parking is free. Unbundling parking from leases creates the ability to establish off-street parking pricing in an area. This allows for the creation of creative parking pricing strategies to reduce dependence on the automobile and encourage the use of transit and TOD strategies.

How does the reduction or elimination of parking requirements result in better use of parking?

The reduction or elimination of parking requirements creates a market-based approach to parking. It allows local jurisdictions and developers to consider more options than just building parking. For example, developers can now compare the cost of a parking space to the cost of providing viable and effective transit options as part of their project feasibility analysis.

Will the reduction in parking supply and increase in parking prices put retail and commercial development at a competitive disadvantage compared with neighboring jurisdictions?

No, not necessarily. The reduction in excess parking supply can allow for better use of land and create more development opportunities, resulting in an increase in retail sales and land values. Parking pricing has also been used to create a competitive advantage for communities. Parking pricing of all-day commuter parking and the allocation of short term priority parking for customers maximizes the efficiency of parking. It creates market value based upon the location, cost, supply and demand for parking spaces. This makes better use of parking spaces and increase revenue and land value.

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Appendix A: California Government Code 95906.5

California Government Code 65906.5. Notwithstanding Section 65906, a variance may be granted from the parking requirements of a zoning ordinance in order that some or all of the required parking spaces be located offsite, including locations in other local jurisdictions, or that in-lieu fees or facilities be provided instead of the required parking spaces, if both the following conditions are met:

a) The variance will be an incentive to, and a benefit for, the nonresidential development.

b) The variance will facilitate access to the nonresidential development by patrons of public transit facilities, particularly guideway facilities.